## Work Order ID 108033-

October-07-13 9:07:00 AM

\*108033\*

Page 1

October-07-13	9:07:00 AM										
Item ID: Revision ID: Item Name:	D4095-041 Wearplate As	ssembly (3		Accept	*N90	<b>1</b> 0040	1100	)* s	etup Start Stop	I VI	S1* S2*
Start Date: Required Date: Reference:	10/07/13	Start Qty: 4.00 Req'd Qty: 4.00			Cust I	tem ID: mer:			Stamp		
Approvals:	Process Pla	an: MLJ	Date: 13-10-08	Tooling:		Date:		ŀ	Run Star	1/1	R1*
	QC:		Date:	SPC (Y/N):		Date:			Stop	*N	R2*
Sequence ID/ Work Center I	D	Operation Description		Set Up/ Run Hours	Tool	ID Tool	# Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Re	vision Nbr							edili.	*	
D4095	В										
*100 *100*		FLOW WATER JET		0.00				4	EZ.	13-10	n-14
Waterjet FLOW CNC Water	jet	Dwg Rev Prog Rev		0.00							
110		QC2-Inspect parts of	ff machine FAI/FAIB	0.00				4	R	12	10-111
*110* QC Quality Control		Memo		0.00				9	и	13-1	0-74.
120		QC8- Inspect parts -	second check	0.00	DAS 27 9-89			()			
*120* QC Quality Control		Memo		0.00	1015			4			

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-C	O	VFOR	MANCE / UPD	ATE	1-9	·	2.64
				-		THE RESERVE OF THE PERSON OF T					QA Closed:	Date:	310
Work Orde	er:					DISPOSITION			·	AGAINST DE	PARTMENT	/PROCESS	
Part No					<del></del> -j	Rework Skid-tube Crosstube Scrap Machining Small Fab Use-as-is Thermoforming Finishing Work Order Update Large Fab Composite			Finishing		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
,,,,,,						Work order opudie	1		corge roo	composite		3uppnet	
Root Cause		Date	Step	Qty		ption of work order update or Non-conformance		nitial ief Eng	Actio Descrip		Sign & Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved									F-				
H 4						F	AUL	T CATE	GORY				
Landi						General		,			1		1
	-	Bending				Bend	H	Grain		-	Ovalized		Pressure/Forced
	$\vdash$	Centre No	t Concer	ntric to	0/5	BOM/Route		Hardwa			Over/Under		Temperature/Cure
	$\vdash$	Cracks			-	Broken/Damaged			on Incomplete		Part Incorre	_	Weld
	-	Crushed/0	rimped.			Burrs			ions Incomplete/Ur	nclear	Part Lost/M	issing	Wrong Stock Pulled
	$\vdash$	Cuffs			_	Contamination		Mainte			Part Moved		
	-	Heat Trea			_	Countersink		Mislabe			Positioned V	_	1
		Inspection	Strip in	Tube		Cut Too Short		Misread			Power Loss/	Surge	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

October-07-13 9:07:00 AM

Required Date: 10/07/13

Item ID:

D4095-041

Accept

\*N900040100\*

Setup Start

Revision ID:

Item Name: Start Date:

Wearplate Assembly

Start Qty: 4.00 10/07/13

\*4\* \*4\*

Cust Item ID:

Customer:

Tool ID

Reference:

Approvals:

Process Plan:

Date:

Tooling:

0.00

0.00

Date:

Start Run

Stop

QC:

Date:

SPC (Y/N):

Set Up/

Run Hours

Date:

Tool#

Plan

Code

Stop

Reject

Qty

Number Stamp

Insp.

Reject

Sequence ID/ Work Center ID

130

\*130\* Brake NC

Brake NC

Operation

Description

Req'd Qty: 4.00

NC BRAKE

Memo

1- bend section C-C first

QC5- Inspect part completeness to step on W/O

2- Form on Brake as per Dwg D4095 using Jigs DT 8179 and DT 8155 3- Form Joggles (2) as per Dwg D4095 on brake using Jig DT 8157

140

\*140\*

OC Quality Control

Memo

Ensure joggle as per dwg D4095

0.00

0.00

DAS 27 9-89

B1016

150

\*150\* Large Fab

Large Fab

Weld per dwg A/R Hardcoat S.S. Batch 127/12

Large Fab

Memo

0.00

Accept

Qty

									DQA:	Date:	
NCR: Yes	/ No		- 1-		WORK ORDER NON-C	ONFOR	MANCE / UF	PDATE	QA Closed:	Date:	
Work Order:					DISPOSITION			AGAINST DE	PARTMENT		
Part No.					Rework Scrap Use-as-is Work Order Update		Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	1	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initial	A	ction	Sign &		-71
Cause	Date	Step	Qty	(	or Non-conformance	Chief Eng	Des	cription	Date	Verification	QC Inspector
Doc/Data  Equip/Tooling  Operator  Material  Setup  Other  Process  Supplier											

**Landing Gear** General Bend Grain Ovalized Pressure/Forced Bending BOM/Route Centre Not Concentric to O/S Hardware Over/Under tolerance Temperature/Cure Broken/Damaged Cracks Inspection Incomplete Part Incorrect Weld Crushed/Crimped. Burrs Wrong Stock Pulled Instructions Incomplete/Unclear Part Lost/Missing Cuffs Maintenance Contamination Part Moved Positioned Wrong Heat Treat Countersink Mislabeled Other Inspection Strip in Tube Cut Too Short Misread Power Loss/Surge Ripples in Bend Drill Holes Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence

Outside Dimensions

**FAULT CATEGORY** 

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Wave/Twist in Tube

Folio

Training Unapproved \*108033\*

Page 3

October-07-13 9:07:00 AM

Item ID:

D4095-041

Accept

\*N900040100\*

Setup Start

Revision ID:

Item Name: Start Date:

Wearplate Assembly

10/07/13

Start Oty: 4.00 Required Date: 10/07/13 Req'd Oty: 4.00 \*4\* \*4\*

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Tool ID

Run Start

Qty

OC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID

160

\*160\*

QC

Operation Description

QC10- Inspect visual per QSI004- ground welds

Set Up/ Run Hours DAS 0.00

0.00 13 96 22

Tool# Plan Code

Accept Qtv

3

Reject Reject Number Stamp

Insp.

Quality Control

170

QC5- Inspect part completeness to step on W/O

0.00

0.00

DAS 27

3

\*170\* OC

Quality Control

Memo

Memo

0.00

\*180\* HandFinish

180

Hand Finishing

Memo

0.00

COAT ENTIRE TOP (CONCAVE) SURFACE WITH ROCKGUARD AS PER DWG

A/R ROCKGUARD BATCH: 127155

3

		Wast Committee
NCR:	Yes	/ No
IVCIV.	163	/ 110

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA:	Date:	F .

											1	QA Closed:	Dat	te:	
Work Orde  Part N  NCR N	lo					DISPOSITION  Rework  Scrap  Use-as-is  Work Order Update			Skid-tube  Machining  noforming  Large Fab	Crosstube Small Fab Finishing Composite	DEF		Water Jet d. Eng. Coor. re/Packaging Supplier	_	Engineering Quality Other
Root						ption of work order update		nitial		tion		Sign &			1
Cause		Date	Step	Qty	(4	or Non-conformance	Ch	ief Eng	Desc	ription		Date	Verification	n	QC Inspector
Doc/Data															
Equip/Tooling											- 1				須
Operator													1		. A.
Material	_														- 3
Setup															
Other															
Process	_														
Supplier								4							3
Training	_														100
Unapproved															
St.	220						AUL	T CATE	GORY	4	_			_	
Landir					_	General		1			_			_	l
	_	ending				Bend		Grain		}		Ovalized	н ,		Pressure/Forced
		entre No	t Concer	itric to	0/5	BOM/Route	-	Hardwa		-		Over/Under		H	Temperature/Cure
		racks			-	Broken/Damaged	$\vdash$		ion Incomplete			Part Incorre		H	Weld
		rushed/C	rimped.		-	Burrs		-	tions Incomplete/	Unclear		Part Lost/M	ssing		Wrong Stock Pulled
		uffs			-	Contamination	-	Mainte		1		Part Moved			
-		eat Treat		= 7	-	Countersink	-	Mislabe				Positioned V			1
		spection		lube		Cut Too Short	-	Misrea	a .	l		Power Loss/	Surge		Other
		ipples in		T. 42-200-200-200		Drill Holes		Offset	Callbankia						
		orque W		xtrusio	n	Drawing		-	Calibration						
	_	urning Se		75.	_	Finish		-	Sequence						
	V	Vave/Twi	st in Tub	e		Folio		Outside	Dimensions						

\*108033\*

Page 4

October-07-13 9:07:00 AM

Item ID:

D4095-041

10/07/13

OC:

Accept

\*N900040100\*

Setup Start

Stop

Revision ID:

Item Name: Start Date:

Wearplate Assembly

Start Oty: 4.00

Reg'd Oty: 4.00

\*4\* \*1\*

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date: Date: Tooling:

0.00

SPC (Y/N):

Date: Date: Run Start

Stop

Sequence ID/

Work Center ID

Required Date: 10/07/13

Operation Description Set Up/ Run Hours Tool ID

Tool# Plan Code Accept

Insp.

190

\*100\*

OC3- Inspect Part Finish

Memo

DAS 27

Oty

3

Reject Qty

Reject Number

Stamp

Quality Control

200

\*200\* Packaging

Memo

Identify as per dwg & Stock Location: F12007 0.00

0.00

Packaging

210

Quality Control

QC21- Final Inspection - Work Order Release

Memo

0.00

0.00

V3 & Il 13/10/23

m 13/10/23.

NCR:	Yes /	No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA:	Date:	- tc.
A CONTRACTOR OF THE PROPERTY O		

										QA Closed:	Date:	2.6
Work Orde	er:				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	158
Part N NCR N	lo				Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube  Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	1	nitial	Act	tion	Sign &	13	148
Cause	Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	QC Inspector
Ooc/Data  quip/Tooling Operator  Material Setup Other Process Supplier Fraining Unapproved												
mapproved		1	-		F	AUL	T CATE	GORY				
Landin	ng Gear				General	0000000						
	Bending Centre No	ot Concer	ntric to (	o/s	Bend BOM/Route Broken/Damaged		Grain Hardwa	re on Incomplete		Ovalized Over/Under Part Incorre	_	Pressure/Forced Temperature/Cure Weld
64	Crushed/ Cuffs				Burrs Contamination		Instruct Mainte	ions Incomplete/ enance	Unclear	Part Lost/M Part Moved	issing	Wrong Stock Pulled
	Heat Trea				Countersink	-	Mislabe			Positioned V	_	+
	Inspection		Tube		Cut Too Short	-	Misread	i		Power Loss/	Surge	Other
-/	Ripples in				Drill Holes	-	Offset					
	Torque W			n	Drawing	-	-	Calibration				
	Turning S				Finish	-		Sequence			Tele	
	Wave/Tw	vist in Tub	е		Folio		Outside	Dimensions				

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

October-07-13 9:07:00 AM

Work Order ID:

108033

Parent Item:

D4095-041

Parent Item Name:

Wearplate Assembly

Start Date: 10/07/13

Required Date: 10/07/13

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP Rev:A nerw issue DD 10.04.26 verified by:EC

Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
	Purchased	No			100	sf	513.3940	2.275		72		
	and a sufficient property of	tem ID Purch	tem ID Purch Item	tem ID Purch Item Location	tem ID Purch Item Location Location	tem ID Purch Item Location Location Seq ID	tem ID Purch Item Location Location Seq ID Measure	tem ID Purch Item Location Location Seq ID Measure Hand	tem ID Purch Item Location Location Seq ID Measure Hand	tem ID Purch Item Location Location Seq ID Measure Hand Qty  Purchased No 100 sf 513.3940 2.275 9.57894	tem ID Purch Item Location Location Seq ID Measure Hand Qty Issued  Purchased No 100 sf 513.3940 2.275 9.5789472	tem ID Purch Item Location Location Seq ID Measure Hand Qty Issued Issued  Purchased No 100 sf 513.3940 2.275 9.5789472

Location	Loc Qty	Loc Code	
MAT020	513.3939998		
123136	140.2		
M126159	31.5		
M126915	341.694		7.6'

No

												DUA.	Date		
NCR:	/es	/ No					WORK ORDER NON-C	100	VFOR	MANCE / UP	PDATE				V = 2540
	_											QA Closed:	Date	e:	10.66
Nork Orde	er:				*		DISPOSITION				AGAINST D	EPARTMENT	/PROCESS		
	101.00						Rework			Skid-tube	Crosstube	7	Water Jet		Engineering
Part N	۱o.						Scrap			Machining	Small Fab	Pro	d. Eng. Coor.		Quality
						- 1	Use-as-is		Thern	noforming	Finishing	Rec/Sto	re/Packaging		Other
NCR 1	١o.						Work Order Update			Large Fab	Composite		Supplier		E-1/2
-														_	1880
Root			5.		Desc	0.7	otion of work order update		nitial		ction	Sign &	22 16 20		
Cause		Date	Step	Qty		О	r Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification		QC Inspector
oc/Data													F = 1		
quip/Tooling perator												· F			
laterial	_			3.5											
etup												-			
ther					11										
rocess														4-1	. 3
upplier															
raining															13
napproved															
								AUL	T CATE	GORY			-		
Landi	ng (	0					General		1		_	_	-		
		Bending			-		Bend		Grain			Ovalized		-	Pressure/Forced
		Centre No	t Concer	tric to	0/5		BOM/Route		Hardwa			Over/Under	-	$\overline{}$	Temperature/Cure
		Cracks			-	_	Broken/Damaged			on Incomplete		Part Incorre	H	$\overline{}$	Weld
		Crushed/C	rimped.		-		Burrs			ions Incomplete,	/Unclear	Part Lost/M	_		Wrong Stock Pulled
		Cuffs					Countarink	-	Mainte			Part Moved			
3		Heat Treat Inspection		Tubo	-		Countersink Cut Too Short	_	Mislabe			Positioned \ Power Loss	_		Other
		Ripples in		Tube	1		Drill Holes	-	Offset	46	L	Power Loss,	Surge L	_ 1	other
		Torque Wa		xtrusio	,		Drawing	-	The second second second	Calibration					1 -5 -5
		Turning Se					Finish			Sequence					28

Outside Dimensions

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Wave/Twist in Tube

Folio

DART AEROSPACE LTD	Work Order:	108033
Description: Wearplate	Part Number:	D4095-1
Inspection Dwg: D4095 Rev: B		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.19	+0.005/-0.001	0.19 8	_	υ	-JKM01	
0.300	+/-0.010	0.363			15	
0.300	+/-0.010	0.302			11	
2.432	+/-0.010	2.44	-		(1	
3.227	+/-0.010	3.221	V		23	
4.06	+/-0.030	4.05	~		iii	
4.98	+/-0.030	4. 984	-		10	
8.43	+/-0.030	8.422	_		11	
9.22	+/-0.030	9.22	~		T JAMOS	
3.500	+/-0.010	3.5	~		a	
24.750	+/-0.010	24.75	~		11	
11.50	+/-0.030	11.5	~		21	
11.472	+/-0.010	11.472			11	
6.000	+/-0.010	6			10	
12.104	+/-0.010	12.104	~		le	
18.000	+/-0.010	18.	/		n	
30.000	+/-0.010	30.	/		4	
9.00	+/-0.030	30.			p	
36.000	+/-0.010	36	~		21	
38.87	+/-0.030	3.875			п	
2.50	+/-0.030	7.5			71	
0.063	+/-0.010	0.06	/		UJKMOI	
			DAS			

Measured by: E2 Audited by: 9-89 Preliminary Approval:

Date: 13-10-14 Date: 13-10-15 Date:

Rev	Date	Change	Revised by Approved
A	11.02.18	New Issue P/O D4095-041	KJ A
В		Dimensions updated per Dwg Rev B	KJ ধ











